Hazard Analysis Form

This form can be used by Fermilab Employees, Fermilab Supervisors, Fermilab Task Managers, Construction Coordinators, Service Coordinators, and Fermilab Subcontractors. This is a dynamic document which may require modification as the project moves from start to finish and should be readily available at the site where the work is being performed.

Job Title Mixing and Adding pool chemicals to COUPP water tank system

Job Location DZero Assembly Building Pit, COUPP area

Contract/Work Order # n/a

AT LEAST TWO SIGNATURES ARE REQUIRED

☐ Prepared _____ Date Oct. 14, 2009

Print Name Russell Rucinski

☐ Accepted _____ Date _____

Print Name _____

☐ Accepted as noted _____ Date _____

Print Name _____

Description of Work: **Check water condition, determine what chemicals need to be added, dilute and/or mix desired chemical in a bucket, pump the fluid in the bucket into the system.**

Personal Protective Equipment: (Check protective equipment required for the job.)

- ✓ Safety glasses □ Side shields
- ✓ Chemical splash goggles
- ✓ □ Chemical resistant gloves (Nitrile, Purple rubber) □ Respirators

□ Other required PPE (specify):

□ Fall protection equipment (specify):

Environmental Aspects (check one):

- ✓ Yes, I have thought about the environmental aspects of this job and will document such aspects and mitigation steps within this document.

□ Yes, I have thought about the environmental aspects of this job and no such credible aspects exist and therefore do not need to be written in this document.

Equipment required for the job: (List the tools needed to perform the job.)

Blue bucket, mixing stick, water test strips, pool chemical assortment

Work Plan History Information: (List any lessons learned incidents from this job, tips from previous jobs)

Improvement/Feedback: At the conclusion of the job, the Task Manager, Supervisor and/or Project Leader shall work with those involved to consider lessons learned and receive feedback in order to improve future work plans.

Check One:

□ **Yes** we have considered lessons learned and accepted feedback on this job and will communicate such information so that future work plans may be improved.

□ **Yes** we have considered lessons learned feedback and determined that future work plans do not need to be improved.

Utilizing the format below, identify hazards and environmental aspects, and their corresponding safety precautions/procedures to mitigate hazards. Use as many sheets as necessary.

HAZARD ANALYSIS

Step	Description	Hazards/ Environmental Aspects	Precautions / Safety Procedures
1	Purge out a gallon of water into a bucket from the filter top valve, MV-95. Then fill a clean small cup or beaker with a sample of water. Dip a test strip in the water per instructions on the bottle. Record the readings.	Could splash a little water. The water is safe to have on skin or down the drain.	Safety glasses.
2	Determine the adjustments that need to be made. The water tank holds about 4000 gallons of water. Test strip indicates good range.	None	None
3	Prepare to mix chemicals into the bucket with 1 gallon of water in it. Put on rubber gloves. Take desired chemical and bucket and mixing stick to an eyewash station.	Chemical irritation on hand from residue left on chemical bottle. Bleach or color spots on clothes. Trip on stairs.	Put on a purple nitrile glove before handling the chemical bottle. Do not let bottle brush up against your clothing. Wear your safety glasses from the previous step. Be careful on the stairs.
4	At eyewash station, measure out needed chemical and mix into the water in the bucket. Stir to dissolve or mix.	Splash in eyes or drip chemical from mixing stick.	Do the mixing with the bucket in the sink. After mixing is complete, place bucket on floor. Rinse mixing stick and sink basin. Use eyewash station if you get splashed in the eye.
5	Carry bucket and mixing stick and chemicals back to COUPP area. Put the pump suction hose into the bucket.	Spill of water with chemical concentration. Trip on stairs.	In the event of a spill, keep others away. Wipe up with rags. Rinse rags in sink or dispose in garbage. Wear safety glasses and rubber gloves. Be careful on stairs.
6	Open discharge valve of pump to the system. Plug in the pump to start pumping the bucket contents into the system.	None	None

7	**When bucket is empty, unplug the pump and close discharge valve. Rinse the bucket and pour waste down floor drain.**	**None. Water and small amount of residual pool chemical is safe.**	**Keep safety glasses and gloves on until the job is over.**
8	**Store the bucket and chemicals and mixing stick. Dispose of gloves**	**None**	**None**
9			
10			

I **have reviewed this hazard analysis and I understand the hazards and required precautionary actions. I will follow the requirements of this hazard analysis or notify my supervisor or Fermilab contact if I am unable to do so.**

Name and ID (please print) Signature Date